

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/649,232	08/26/2003	Edward P. Ingenito	10991-002004	6203 ·
23628 7590 02/28/2007 WOLF GREENFIELD & SACKS, PC FEDERAL RESERVE PLAZA			EXAMINER	
			WILLIAMS, CATHERINE SERI	HERINE SERKE
600 ATLANTIC AVENUE BOSTON, MA 02210-2206		,	ART UNIT	PAPER NUMBER
			3763	
SHORTENED STATUTOR	Y PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
3 MO	NTHS	02/28/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

		Ge	
	Application No.	Applicant(s)	
	10/649,232	INGENITO, EDWARD P.	
Office Action Summary	Examiner	Art Unit	
	Catherine S. Williams	3763	
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address	
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION  16(a). In no event, however, may a reply be tim  rill apply and will expire SIX (6) MONTHS from to cause the application to become ABANDONEL	l. ely filed he mailing date of this communication. D (35 U.S.C. § 133).	
Status			
<ul> <li>1) Responsive to communication(s) filed on <u>02 Not</u></li> <li>2a) This action is FINAL. 2b) This</li> <li>3) Since this application is in condition for allowant closed in accordance with the practice under E</li> </ul>	action is non-final. ace except for formal matters, pro		
Disposition of Claims			
4)  Claim(s) 1-18 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5)  Claim(s) is/are allowed. 6)  Claim(s) 1-18 is/are rejected. 7)  Claim(s) is/are objected to. 8)  Claim(s) are subject to restriction and/or			
Application Papers			
9) The specification is objected to by the Examiner 10) The drawing(s) filed on is/are: a) access applicant may not request that any objection to the or Replacement drawing sheet(s) including the correction of the original transfer and the correction of	epted or b) objected to by the Edrawing(s) be held in abeyance. See on is required if the drawing(s) is obj	37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).	
Priority under 35 U.S.C. § 119		·	
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau * See the attached detailed Office action for a list of	s have been received. s have been received in Application ity documents have been received (PCT Rule 17.2(a)).	on No d in this National Stage	
Attachment(s)  1) ☑ Notice of References Cited (PTO-892)	4)  Interview Summary	(PTO-413)	

U.S. Patent and Trademark Office PTOL-326 (Rev. 7-05)

Paper No(s)/Mail Date \_\_\_\_\_.

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)

Paper No(s)/Mail Date. \_\_

6) Other: \_

5) Notice of Informal Patent Application (PTO-152)

Application/Control Number: 10/649,232

Art Unit: 3763

## **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in-
- (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or
- (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

Claims 1 and 14-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Perkins et al (6,287,290).

Perkins discloses methods, systems and kits for lung volume reduction that includes advancing a bronchoscope (see 8:18+) and introducing biological material to reduce the volume of the lung (see 10:37+). The method includes blocking air flow (9:19+). The collapsed region may be over inflated prior to collapsing the region (9:33). An oxygen rich gas can be introduced prior to collapse (see 6:59+ and 9:45). The collapsed region will be sealed by methods including using a plug of hydrated collagen hydrogel (biological material for promoting fibrosis and increasing surface tension), gluing (including fibrin see 2:39) and energy-mediated tissue adhesion, etc (10:37-45).

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perkins et al in view of Edwardson et al (US 5,739,288).

Perkins meets the claim limitations as described above but fails to disclose the use of fibrinogen and a fibrinogen activator such as thrombin.

Edwardson et al disclose a fibrin sealant composition that can be used for sealing tracheal and bronchial anastomoses and air leaks or lacerations of the lung (promoting fibrosis) that includes fibrinogen, thrombin, clot promoting factor XIIIa and antibiotics. Since the invention of Perkins is drawn to closing a region of the lung by gluing tissue (see Perkins 10:40) and Edwardson teaches a composition to enhance the closure of leaks or laceration of the lung (i.e. a tissue sealant) a combination is proper. At the time of the invention, it would have been obvious to use the fibrin sealant of Edwardson et al in order to provide an enhanced fibrin formulation for tissue closure thereby improving patient recovery time.

Claims 2-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perkins in view of Edwardson in further view of Antanavich et al (US 5,814,022).

Perkins meets the claim limitations as described above but fails to disclose the use of fibrinogen and a fibrinogen activator such as thrombin.

Edwardson et al disclose a fibrin sealant composition that can be used for sealing tracheal and bronchial anastomoses and air leaks or lacerations of the lung (promoting fibrosis) that includes fibrinogen, thrombin, clot promoting factor XIIIa and antibiotics. Since the invention of Perkins is drawn to closing a region of the lung by gluing tissue (see Perkins 10:40) and Edwardson teaches a composition to enhance the closure of leaks or laceration of the lung (i.e. a tissue sealant) a combination is proper. At the time of the invention, it would have been obvious to use the fibrin sealant of Edwardson et al in order to provide an enhanced fibrin formulation for tissue closure thereby improving patient recovery time.

Perkins in view of Edwardson meets the claim limitations as described above but fails to include the composition comprising 3-12% fibringen.

Antanavich discloses a method and apparatus for applying tissue sealant that includes the use of an adhesive protein solution having a fibrinogen content of from 3 to 12% with clot promoting factor XIIIa and further notes that one reason for this arrangement is that the strength of the sealant is proportional to the fibrinogen concentration. Since the invention of Perkins is drawn to closing a region of the lung by gluing tissue (see Perkins 10:40) and Antanavich teaches an enhanced fibrin sealant composition a combination is proper. At the time of the invention, it would have been obvious to incorporate the concentration of fibrinogen as taught by Antanavich et al into the invention of Perkins in order to have an adhesive protein solution that is less prone to clogging before administered to the therapeutic site as taught by Antanavich et al.

## Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-3,13 and 15 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 14,15,22,23,31,55,60 of copending Application No. 10/069307. Although the conflicting claims are not identical, they are not patentably distinct from each other because the instant claims are a broader recitation of the copending claims.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Application/Control Number: 10/649,232

Art Unit: 3763

Conclusion

Page 6

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Catherine S. Williams whose telephone number is 571/2724970.

The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Brian Casler can be reached on 571/27249773552. The fax phone numbers for the

organization where this application or proceeding is assigned are (571) 273-8300 for regular

communications and (571) 273-8300 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is 571/2722975.

Catherine S. Williams

Tathering S. William

February 20, 2007

CATHERINE S. WILLIAMS PRIMARY EXAMINER